

## CLAIMS

What is Claimed is:

1. A light source unit comprising:
  - 5 a double-ended high-pressure discharge lamp including a luminous bulb into which a luminous material is encapsulated and first and second sealing portions respectively extending from both ends of the luminous bulb; and
  - a reflecting mirror for reflecting light emitted from the high-pressure discharge lamp, wherein the reflecting mirror comprises a reflecting portion for reflecting the light, a
  - 10 wide opening provided toward the direction in which the light outgoes, and a neck portion in which a narrow opening is provided to fix the high-pressure discharge lamp, said reflecting portion and said neck portion being formed as one unit,
  - the first sealing portion of the high-pressure discharge lamp is inserted into the narrow opening of the reflecting mirror and fixed to the neck portion, and
  - 15 at least one air hole communicating with the narrow opening is provided in the neck portion.
2. The light source unit of Claim 1, wherein
  - one or more air holes are provided in the neck portion, and all of said one or more air holes are placed vertically below the lamp when viewed with the lamp turned on in a
  - 20 horizontal position.
3. The light source unit of Claim 1, wherein
  - said at least one air hole is a slit or a circular hole.
4. The light source unit of Claim 1, wherein
  - a front glass is provided over the wide opening.
- 25 5. A reflecting mirror for reflecting light emitted from a high-pressure discharge lamp, comprising:
  - a reflecting portion for reflecting the light;

a wide opening provided toward the direction in which the light outgoes; and

a neck portion in which a narrow opening is provided to fix the high-pressure discharge lamp, said reflecting portion and said neck portion being formed as one unit,

wherein at least one air hole communicating with the narrow opening is provided in

5 the neck portion.